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WHAT IS CLAIMED:

1. An isolated protein or polypeptide corresponding to a protein or polypeptide of a *Rupestris* stem pitting associated virus.
2. The isolated protein or polypeptide according to claim 1, wherein the protein or polypeptide is selected from a group consisting of a replicase, a coat protein, and a protein of a triple gene block.
3. The isolated protein or polypeptide according to claim 2, wherein the protein or polypeptide is a replicase.
4. The isolated protein or polypeptide according to claim 3, wherein the protein or polypeptide comprises an amino acid sequence corresponding to SEQ. ID. No. 3, SEQ. ID. No. 14, or SEQ. ID. No. 25.
5. The isolated protein or polypeptide according to claim 3, wherein the protein or polypeptide has a molecular weight of about 240 to 246 kDa.
6. The isolated protein or polypeptide according to claim 2, wherein the protein or polypeptide is a coat protein.
7. The isolated protein or polypeptide according to claim 6, wherein the protein or polypeptide comprises an amino acid sequence corresponding to SEQ. ID. No. 11, SEQ. ID. No. 22, or SEQ. ID. No. 33.
8. The isolated protein or polypeptide according to claim 6, wherein the protein or polypeptide has a molecular weight of about 25 to 30 kDa.
9. The isolated protein or polypeptide of claim 2, wherein the protein or polypeptide is a protein of a triple gene block.

10. The isolated protein or polypeptide according to claim 9, wherein the protein or polypeptide comprises an amino acid sequence corresponding to SEQ. ID. No. 5, SEQ. ID. No. 16, or SEQ. ID. No. 27.

11. The isolated protein or polypeptide according to claim 9, wherein the protein or polypeptide comprises an amino acid sequence corresponding to SEQ. ID. No. 7, SEQ. ID. No. 18, or SEQ. ID. No. 29.

12. The isolated protein or polypeptide according to claim 9, wherein the protein or polypeptide comprises an amino acid sequence corresponding to SEQ. ID. No. 9, SEQ. ID. No. 20, or SEQ. ID. No. 31.

13. The isolated protein or polypeptide according to claim 9, wherein the protein or polypeptide has a molecular weight of 20 to 26 kDa, 10 to 15 kDa, or 5 to 10 kDa.

14. The isolated protein or polypeptide according to claim 1, wherein the protein or polypeptide is purified.

15. The isolated protein or polypeptide according to claim 1, wherein the protein or polypeptide is recombinant.

16. An isolated RNA molecule encoding a protein or polypeptide according to claim 1.

17. The isolated RNA molecule according to claim 16, wherein the protein or polypeptide is selected from a group consisting of a replicase, a coat protein, and a protein of a triple gene block.

18. An isolated DNA molecule encoding a protein or polypeptide according to claim 1.

19. The isolated DNA molecule according to claim 18, wherein the protein or polypeptide is selected from a group consisting of a replicase, a coat protein, and a protein of a triple gene block.

20. The isolated DNA molecule according to claim 19, wherein the protein or polypeptide is a replicase.

21. The isolated DNA molecule according to claim 20, wherein the protein or polypeptide comprises an amino acid sequence corresponding to SEQ. ID. No. 3, SEQ. ID. No. 14, or SEQ. ID. No. 25.

22. The isolated DNA molecule according to claim 21, wherein the DNA molecule comprises a nucleotide sequence corresponding to SEQ. ID. No. 2, SEQ. ID. No. 13, or SEQ. ID. No. 24.

23. The isolated DNA molecule according to claim 19, wherein the protein or polypeptide is a coat protein.

24. The isolated DNA molecule according to claim 23, wherein the protein or polypeptide comprises an amino acid sequence corresponding to SEQ. ID. No. 11, SEQ. ID. No. 22, or SEQ. ID. No. 33.

25. The isolated DNA molecule according to claim 24, wherein the DNA molecule comprises a nucleotide sequence corresponding to SEQ. ID. No. 10, SEQ. ID. No. 21, or SEQ. ID. No. 32.

26. The isolated DNA molecule according to claim 19, wherein the protein or polypeptide is a protein of a triple gene block.

27. The isolated DNA molecule according to claim 26, wherein the protein or polypeptide comprises an amino acid sequence corresponding to SEQ. ID. No. 5, SEQ. ID. No. 16, or SEQ. ID. No. 27.

28. The isolated DNA molecule according to claim 27, wherein the DNA molecule comprises a nucleotide sequence corresponding to SEQ. ID. No. 4, SEQ. ID. No. 15, or SEQ. ID. No. 26.

29. The isolated DNA molecule according to claim 26, wherein the protein or polypeptide comprises an amino acid sequence corresponding to SEQ. ID. No. 7, SEQ. ID. No. 18, or SEQ. ID. No. 29.

30. The isolated DNA molecule according to claim 29, wherein the DNA molecule comprises a nucleotide sequence corresponding to SEQ. ID. No. 6, SEQ. ID. No. 17, or SEQ. ID. No. 28.

31. The isolated DNA molecule according to claim 26, wherein the protein or polypeptide comprises an amino acid sequence corresponding to SEQ. ID. No. 9, SEQ. ID. No. 20, or SEQ. ID. No. 31.

32. The isolated DNA molecule according to claim 31, wherein the DNA molecule comprises a nucleotide sequence corresponding to SEQ. ID. No. 8, SEQ. ID. No. 19, or SEQ. ID. No. 30.

33. An expression system comprising a vector into which is incorporated a heterologous DNA molecule according to claim 18.

34. The expression system according to claim 33, wherein the protein or polypeptide is selected from a group consisting of a replicase, a coat protein, and a protein of a triple gene block.

35. A host cell transformed with a heterologous DNA molecule according to claim 18.

36. The host cell according to claim 35, wherein the host cell is selected from a group consisting of *Agrobacterium vitis* and *Agrobacterium tumefaciens*.

37. The host cell according to claim 35, wherein the host cell is a grape cell.

38. The host cell according to claim 35, wherein the protein or polypeptide is selected from a group consisting of a replicase, a coat protein, and a protein of a triple gene block.

39. A transgenic *Vitis* scion cultivar or rootstock cultivar comprising the DNA molecule according to claim 18.

40. A transgenic *Vitis* scion cultivar or rootstock cultivar according to claim 39, wherein the protein or polypeptide is selected from a group consisting of a replicase, a coat protein, and a protein of a triple gene block.

41. A method of imparting *Rupestris* stem pitting associated virus resistance to a *Vitis* scion cultivar or rootstock cultivar comprising:
transforming a *Vitis* scion cultivar or rootstock cultivar with a DNA molecule according to claim 18.

42. The method according to claim 41, wherein the protein or polypeptide is selected from a group consisting of a replicase, a coat protein, and a protein of a triple gene block.

43. The method according to claim 41, wherein the *Rupestris* stem pitting associated virus is RSPaV-1, RSP47-4, or RSP158.

44. The method according to claim 41, wherein said transforming is *Agrobacterium* mediated.

45. The method according to claim 41, wherein said transforming comprises:

propelling particles at grape plant cells under conditions effective for the particles to penetrate into the cell interior and

introducing an expression vector comprising the DNA molecule into the cell interior.

46. An antibody or binding portion thereof or probe recognizing the protein or polypeptide according to claim 1.

47. The antibody or binding portion thereof or probe according to claim 46, wherein the protein or polypeptide is selected from a group consisting of a replicase, a coat protein, and a protein of a triple gene block.

48. A method for detection of *Rupestris* stem pitting associated virus in a sample, said method comprising:

providing an antibody or binding portion thereof recognizing the protein or polypeptide according to claim 1;

contacting the sample with the antibody or binding portion thereof; and detecting any reaction which indicates that *Rupestris* stem pitting associated virus is present in the sample using an assay system.

49. A method according to claim 48, wherein the assay system is selected from a group consisting of enzyme-linked immunoabsorbent assay, radioimmunoassay, gel diffusion precipitin reaction assay, immunodiffusion assay, agglutination assay, fluorescent immunoassay, protein A immunoassay, and immunoelectrophoresis assay.

50. A method according to claim 48, wherein said detecting is effective to detect any strain of *Rupestris* stem pitting associated virus.

51. A method for detection of *Rupestris* stem pitting associated virus in a sample, said method comprising:

providing a nucleotide sequence of the DNA molecule according to claim 18 as a probe in a nucleic acid hybridization assay;

contacting the sample with the probe; and

detecting any reaction which indicates that *Rupestris* stem pitting associated virus is present in the sample.

52. A method according to claim 51, wherein the nucleic acid hybridization assay is selected from a group consisting of dot blot hybridization, tissue printing, southern hybridization, and northern hybridization.

53. A method according to claim 51, wherein said detecting is effective to detect any strain of *Rupestris* stem pitting associated virus.

54. A method according to claim 53, wherein the probe has a nucleotide sequence selected from a group consisting of SEQ. ID. No. 53, SEQ. ID. No. 54, SEQ. ID. No. 51, and SEQ. ID. No. 52.

55. A method for detection of *Rupestris* stem pitting associated virus in a sample, said method comprising:

providing a nucleotide sequence of the DNA molecule according to claim 18 as a probe in a gene amplification detection procedure;

contacting the sample with the probe; and

detecting any reaction which indicates that *Rupestris* stem pitting associated virus is present in the sample.

56. A method according to claim 55, wherein the gene amplification detection procedure is selected from a group consisting of polymerase chain reaction and immunocapture polymerase chain reaction.

57. A method according to claim 55, wherein said detecting is effective to detect any strain of *Rupestris* stem pitting associated virus.

58. A method according to claim 57, wherein the probe has a nucleotide sequence selected from a group consisting of SEQ. ID. No. 53, SEQ. ID. No. 54, SEQ. ID. No. 51, and SEQ. ID. No. 52.

59. An oligonucleotide primer capable of hybridizing to a nucleic acid of a *Rupestris* stem pitting associated virus.

60. An oligonucleotide primer according to claim 59, wherein the oligonucleotide primer comprises a nucleotide sequence of SEQ. ID. No. 41, SEQ. ID. No. 42, SEQ. ID. No. 43, SEQ. ID. No. 44, SEQ. ID. No. 45, SEQ. ID. No. 46, SEQ. ID. No. 47, SEQ. ID. No. 48, SEQ. ID. No. 49, SEQ. ID. No. 50, SEQ. ID. No. 51, SEQ. ID. No. 52, SEQ. ID. No. 53, or SEQ. ID. No. 54.

61. An oligonucleotide primer according to claim 59, wherein the oligonucleotide primer is capable of hybridizing to a nucleic acid of any strain of *Rupestris* stem pitting associated virus and comprises a nucleotide sequence of SEQ. ID. No. 51, SEQ. ID. No. 52, SEQ. ID. No. 53, or SEQ. ID. No. 54.

62. The isolated DNA molecule according to claim 18, wherein the DNA molecule comprises a nucleotide sequence of SEQ. ID. No. 34, SEQ. ID. No. 35, SEQ. ID. No. 36, SEQ. ID. No. 37, SEQ. ID. No. 38, SEQ. ID. No. 39, SEQ. ID. No. 40.

63. The isolated DNA molecule according to claim 18 wherein the DNA molecule comprises a nucleotide sequence of SEQ. ID. No. 1, SEQ. ID. No. 12, or SEQ. ID. No. 23.